



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 24 2014

**MEMORANDUM**

OFFICE OF  
WATER

**SUBJECT:** Enhancing Coordination and Communication with States on Review and Approval of  
Aquifer Exemption Requests Under SDWA

**FROM:** Peter Grevatt, Director  
Office of Ground Water and Drinking Water (OGWDW)

**TO:** Water Division Directors Regions I – X

**I. Introduction**

More than four thousand aquifer exemptions have been approved over the history of the UIC program, and the vast majority of these have been straightforward actions that have been completed in a timely manner. There are some aquifer exemption decisions, however, where review of the aquifer exemption request has been considerably more complex, due to specific conditions associated with the proposed exemption. In some cases, these issues have led to protracted discussions between EPA and the states, without a clear path for resolution.

The purpose of this memorandum is to promote a consistent and predictable process for the review of Aquifer Exemption requests under the Safe Drinking Water Act (SDWA).<sup>1</sup> EPA has both a direct implementation role and a state partnership role in reviewing and approving aquifer exemption requests. Over the course of the past year, EPA has participated in discussions with a number of states through a Ground Water Protection Council (GWPC) workgroup to review issues associated with more complex aquifer exemption requests and to make recommendations on steps to improve the review process. Based on these discussions, EPA and the participating states agreed on a number of steps to enhance coordination and communication between EPA Regions and state UIC programs regarding proposed aquifer exemptions, as discussed below.

**II. Roles and Responsibilities**

EPA is responsible for the final review and approval of all aquifer exemption requests, based on the regulatory criteria in 40 CFR 146.4 [attached]. UIC permit applicants that need an aquifer exemption in order to conduct injection activities typically delineate the proposed exempted area and submit the delineation to the primacy agency, along with information to support a determination under 40 CFR 146.4 that the proposed exemption is appropriate. States or tribes with primacy review the application and, if the information submitted supports a determination that an aquifer exemption is warranted, make a designation, provide for public participation, and submit a request for approval of the exemption to the

<sup>1</sup> The substantive and procedural requirements for aquifer exemptions in connection with Class VI wells are not addressed in this memo.

appropriate EPA regional office. Primacy states and tribes are also responsible for issuing the UIC permit that goes with the aquifer exemption request and are the direct point of contact for the owners or operators requesting the permit and exemption. Where EPA directly implements the UIC program, the applicant submits the request directly to EPA, and EPA reviews the applicant's demonstrations and makes the final determination to approve or disapprove the exemption request.

If the aquifer exemption is a non-substantial program revision, the relevant EPA Region either responds by letter to the primacy state or tribe or, where EPA directly implements the program, to the applicant. If the aquifer exemption is a substantial program revision, notice of approval of the aquifer exemption is published in the *Federal Register* after EPA has provided public notice and an opportunity for public comment and a public hearing. Where EPA directly implements the UIC program, regional offices are also responsible for identifying and designating exempted aquifers or portions of aquifers at the request of a UIC permit applicant, issuing public notices, and issuing any related UIC permits following aquifer exemption approval. Regional Administrators are primarily responsible for approving/disapproving non-substantial aquifer exemption requests, and the Administrator is responsible for approving the request if the exemption is a substantial program revision.

### **III. Recommended Steps for Facilitating the Aquifer Exemption Review and Approval Process**

As indicated above, most aquifer exemption requests have clearly met the regulatory criteria in 40 CFR 146.4, and reviews have been completed in a timely manner. There are some aquifer exemption requests, however, that have proven to be considerably more complex to review. These more complex aquifer exemption requests have not been limited to substantial program revisions; in some cases, non-substantial aquifer exemption requests have proved quite complex as well. Typically, these have involved situations where the proposed exempted area is located adjacent to an underground source of drinking water (USDW) that is currently in use, or where the potential future use of the USDW is unclear. The following steps are recommended to help facilitate the aquifer exemption review and approval process:

- a. Each Region should adopt and share the attached aquifer exemption checklist with each of your states. OGWDW, in consultation with the Regions and states, developed the attached checklist to facilitate EPA's aquifer exemption review process and documentation. The checklist will help convey to states, tribes, and UIC permit applicants the typical information needed to facilitate EPA's review of an aquifer exemption request.
- b. Regions should document their review and analysis of the information in the checklist in a Statement of Basis or decision memo that should be included in the Agency's record of its final action. The Statement of Basis should include explanations of the factual, technical, and legal bases for the determination. Information collected following the template of the checklist should inform the Statement of Basis.
- c. In the case of aquifer exemption requests that are expected to be complex, EPA Regions are encouraged to schedule a discussion with the state UIC program managers as early in the process as possible. These discussions will serve to identify any potential technical issues that require additional attention even before the package has been submitted to EPA for review and approval.

- d. Regional UIC program managers are encouraged to elevate significant disagreements on AE requests to senior primacy program managers rather than allowing them to persist at the staff level for extended periods of time. While HQ can offer assistance on specific Regional AE decisions, I anticipate that most technical issues can be resolved at the Regional level.

#### **IV. Additional background for Approving and Documenting Aquifer Exemptions**

The Safe Drinking Water Act (SDWA) directed EPA to establish an Underground Injection Control (UIC) program to prevent endangerment of Underground Sources of Drinking Water (Section 1421(b)(1)). EPA's regulatory approach to aquifer exemptions was promulgated in a 1980 rulemaking. EPA determined that without aquifer exemptions, certain types of energy production, solution mining, or waste disposal would be severely limited. Thus, the regulatory approach that EPA adopted—a broad definition of covered underground waters coupled with a discretionary exemption mechanism—allows the agency to prevent endangerment consistent with the statute while allowing some case-by-case consideration. This approach protects underground sources of drinking water while also allowing underground injection associated with industrial activities including the production of minerals, oil, or geothermal energy. EPA retains the final approval authority over aquifer exemption decisions regardless of state primacy status.

EPA must follow the regulatory criteria at 40 CFR 146.4 in making aquifer exemption determinations. For the EPA to approve an aquifer exemption, the Agency must first find that the state or, where EPA directly implements the UIC program, the applicant, has demonstrated that the aquifer or the portion of an aquifer identified by the state as exempt “does not currently serve as a source of drinking water” (40 CFR 146.4 (a)). EPA has determined that water that currently serves as a source of drinking water includes water that is being withdrawn in the present moment as well as water that will be withdrawn in the future by wells that are currently in existence. EPA's evaluation of this criterion ensures that water from the exempted area of the aquifer “does not currently serve as a source of drinking water” for nearby drinking water wells as required by 40 CFR 146.4(a).

The second exemption criterion requires EPA to determine either that the aquifer cannot now and will not in the future serve as a source of drinking water or that the total dissolved solids content of the ground water is more than 3,000 and less than 10,000 mg/l and it is not reasonably expected to supply a public water system.<sup>2</sup> The regulations at 40 CFR 146.4(b) describe four (4) potential reasons for making the determination that the aquifer cannot now and will not in the future serve as a source of drinking water. One reason (146.4(b)(1)) is that the aquifer is mineral, hydrocarbon, or geothermal energy producing, or can be demonstrated as part of a permit application to contain minerals or hydrocarbons that are expected to be commercially producible. The other reasons relate to practicality of access to water. EPA is continuing discussions with the GWPC workgroup to better define and communicate the type of data and analyses used to support those determinations. EPA Regions will need to document all reasons and factors they considered in a Statement of Basis or decision memo when making the final aquifer exemption decision. As best management practice, EPA will continue to communicate to the states the importance of documenting aquifer exemption analyses and their decision making process.

Robust recordkeeping and management of decision memos and aquifer exemption data is critically important to support informed decisions related to public and private ground water uses for drinking water. Therefore, in addition to the decision memos and records underlying EPA's approval/disapproval

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<sup>2</sup> EPA will fully address the criteria 146.4 (b) and 146.4(c) at a later time, after ongoing discussions with GWPC have concluded.

decisions, it is essential that regions maintain standardized, readily available data on all existing aquifer exemptions. Proper recordkeeping and data management at the regional level will help with mapping and geospatial analysis for greater accessibility and comprehension of the exemption data and ensure that potentially affected parties are made aware of the exempted areas. Additionally it will enhance HQ efforts to facilitate a national tracking mechanism for approved exemptions.

## **Conclusion**

Recognizing that EPA's approval of an aquifer exemption request is typically required prior to issuance of a UIC permit, regional UIC programs should establish early communication with the primacy state to inform EPA's review. The Region should start its review with the information provided in the primacy program's designation and approval request. If questions arise or further information is needed to either supplement the request or clarify specific data points related to the proposed exempted aquifer, the Region should work with the primacy program to obtain this information at the earliest opportunity. The Region should also work expeditiously with the primacy program to resolve any disagreements arising from the aquifer exemption process.

While there are other technical and policy issues associated with aquifer exemptions that are not addressed by this memorandum, I hope that the clarity on the review and determination process for aquifer exemptions provided herein, will help the Agency's effort to achieve national consistency and clarify expectations from states and tribes (and potentially owners or operators) on aquifer exemptions. The Agency will continue to work in consultation with states and stakeholders to promote a consistent and predictable process for the review of aquifer exemption requests under the Safe Drinking Water Act (SDWA).

## **Attachments**